To whom it may concern,

On the subject of broadband over power lines (henceforth, bpl) it would appear that there are several concerns that cannot be easily addressed. First of all, interference to high frequency (hf) radio reception has been demonstrated by a number of organizations, including the American Radio Relay League. This interference has caused Japan, Germany and the Netherlands to forgo licensing this type of service. The ARRL has in particular demonstrated the interference potential to equipment typically in use by members of the Amateur Radio Service. I'm sure the Commission is aware of the key roles played by amateur radio operators
in both 9/11 and the space shuttle Columbia tragedy. Clearly, it would be a disservice to the country to prevent such operators from gaining the skills that made they and their colleagues so valuable. Bpl has the potential to render the amateur service largely untenable near high concentrations of bpl usage. The Commission should also note the role that amateur radio operators
play in fostering good will among like minded people abroad, who then relay that to friends and family that would otherwise have no, or minimal contact with the people of this nation. In these troubled times, such efforts can only help.

Secondly, Japanese scientists have demonstrated that bpl also interferes with the spectrum set aside for radio telescope usage. This is a powerful tool for exploring the universe outside of our own planet, and should be protected because of the potential it has for education and exploration. Again, the noise levels typical of bpl are such that this scientific endeavor will be greatly curtailed.

Thirdly, it must be assumed if two spectrum users are likely to suffer interference, then so are others to a greater or lesser extent. Power lines are a reasonable means for transmitting power and low frequency signals. However, they were never intended to carry high frequency signals and in fact look to be very good radiators of such signals. The condition of the power grid is suspect from a signal emission and transmission point of view because of the long runs of wire, and lumped circuit constants that will likely rectify some signals. In fact, one wonders what the potential is for disruption in the home from unwanted signals.

Fourthly, I am concerned that the radiated signals will make it easy to eaves drop on data communications individuals assume to be safe. Currently, access to data packets can only be attained by inserting ones equipment into the network at an appropriate node. However, Internet routing is not structured and so will take the best available route exposing the packets in transit should they transfer over a bpl link that radiates.

In closing, I would urge the commission to apply the same logic as that applied to other communications systems rather than assume that the benefits outweigh the inconvenience.

Respectfully,

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